

Death Valley Ranch Chimes Tower
Death Valley National Monument
Inyo County
California

HABS No. CA-2257 F

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14-DVNM,
1-F-

PHOTOGRAPHS

REDUCED COPIES OF MEASURED DRAWINGS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY

DEATH VALLEY RANCH CHIMES TOWER
(Scotty's Castle, Chimes Tower)

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Location: National Park Service Route 5 (commonly known as the North Highway), 25 miles west of the junction of US Route 95 with Nevada State Route 267 (commonly known as Scotty's Junction), Death Valley National Monument, Inyo County, California.

Present Owner: National Park Service.

Present Use: Chimes and clock tower (chimes have been out of order since 1984); sleeping quarters (presently not in use).

Significance: The Chimes Tower is the most prominent structure within the Death Valley Ranch complex for a variety of reasons. Its height and hilltop location, large clock, lavish use of brightly colored tile and its twenty-five tone carillon all served to make it the architectural and cultural centerpiece of the Ranch.

PART I. HISTORICAL INFORMATION

Note: For general information on the Death Valley Ranch complex, see HABS No. CA-2257.

A. Physical History:

1. Date of Erection:

June 1927 - Johnson purchased J.C. Deagan sixteen-tone carillon.
By November 1928 - Tower construction began.¹
March 1929 - Tower construction practically completed.²
April 1930 - Nine additional tones and automatic roll player purchased.³
February 1931 - Construction of the concrete terrace surrounding the base of the Tower began, but never finished.⁴
1930 - The first chimes system was installed.⁵
1946 - The second chimes system was installed.

2. Designer - Charles A. MacNeilledge
Delineator - Martin de Dubovay

3. Original and Subsequent Owners:

Albert Mussey Johnson (1928-1948)
Gospel Foundation (1948-1970)
National Park Service (1970-Present)

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4. Builder, manufacturer, etc:

General Superintendent - M. Roy Thompson.

Building Superintendent - H. B. Brown (1927-1930); C.C. Johnson (1930-1931).

First chimes system installer - Roy Lofink.⁶

Second chimes system installer - James Boling.⁷

Manufacturer of chimes - J.C. Deagan, Chicago, Illinois.

Manufacturer of clockworks - E. Howard Clock Co., Boston, Mass.

Manufacturer of clockface tiles - The Spanish Pottery, Los Angeles, California.

5. Original plans and construction: The Chimes Tower was originally conceived by Johnson as an element of the Death Valley Ranch complex that could either be incorporated as part of the Barn or stand in isolation on the hill to the west of the Main House. In 1927 Johnson instructed MacNeilledge to prepare drawings for either option. Johnson first thought that the sound of the chimes would be better from the stable and decided to place it there.⁸ Johnson then purchased a 16-tone chimes system and an automatic roll player from the J.C. Deagan Inc., in Chicago, Illinois.⁹

For reasons unknown, Johnson changed his mind and relocated the tower to its alternate location. Construction began in November 1928 and by March 1929 the basic four-story structure was completed. The brown and beige stucco exterior treatment and hand-sawn "antiqued" wood trim echo the basic styling motif of most of the previous structures and remain faithful to the "Spanish Mediterranean" design scheme that MacNeilledge had established. Several new stylistic elements, however, were introduced since the first designs of the tower by MacNeilledge in 1927. The Medieval elements of Romanesque columns along the entry porch, the machicolation supporting the encircling stairway, false rustication of the base and the coat of arms centered within the Art Deco tile roof all point to a "Medieval" design sensibility that coincided with Johnson's hiring of a new architect, Martin de Dubovay, in 1928, as a draftsman in MacNeilledge's studio. This is approximately the same time that the decision to relocate the tower to its "west hill" location was made and might have also been related to the hiring of the new architect.

The new plans called for a fully landscaped area to be known as the "Plateau." It would extend from the roofline of the Power House to the east and completely wrap around the Tower's terrace to the west. The terrace and the paths leading to it were to be covered with flagstone. Low concrete walls north and south of the terrace running from the roofline of the Power House were to be bordered with plantings.¹⁰

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In 1930, Johnson purchased an additional nine chimes and an automatic roll player.¹¹ Installation of the twenty-five tone carillon by the manufacturer was dependent upon the completion of the Power House, the installation of the diesel generator and the electricity it would provide. By November 1930 the first diesel generator was operational (See Power House, HABS No. CA-2257 E) and installation of the chimes closely followed. With the additional purchase of the "Westminster Chiming Device" the chimes sounded out the quarter hour automatically.

In 1941, Johnson purchased a second-hand "harmonic" chimes system. This, like the previous system, could be played by an automatic roll player and a keyboard in the mechanism room of the tower. It differed from what he had, in that it could play more than a single note at a time. Since 1946, when the new system was installed, a smaller remote keyboard in the lower music room has not been equipped to play it. The individual chimes range in size from approximately 12' to 47" in length.¹²

In the 1970s the J.C. Deagan Company went out of business after producing and installing close to 500 of these systems across the country. Less than 100 survive today.¹³

6. Alterations and additions: An electric radio repeater was affixed to the sidewall of the observation deck. It is used for radio communications with the Headquarters of the National Monument at Furnace Creek and was probably added soon after ownership was transferred from the Cospel Foundation to the National Park Service.

In 1983 the Tower was re-wired.¹⁴ In April 1987 the chimes ceased to function.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: As an architectural element within the total composition of the Ranch, the Chimes Tower served as the western terminus of the longitudinal axis that originated with the formation of the central throughways between first the Main House and Annex and later the two wings of the Barn. This axis was later confirmed with the grading of a connecting road from one throughway to the other and parallel placement of the Guest House and the "Watercourse" to either side.

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2. Condition of Fabric: Fair. The exterior stucco finish is cracking badly and in several areas has fallen completely away from the structure. A few decorative tiles have fallen from the clockface on the south facade and from the tile coping of the exterior stairway and porch landings.

B. Description of Exterior:

1. Over-all dimensions: Terrace - 50'-5" x 51'-2".
Chimes Tower - 17'-3" x 17'-3".
2. Foundations: Concrete.
3. Wall construction, finish, color: The first two stories are formed of concrete and have a brown and beige stucco finish. The top two stories are all of wood-frame construction, infilled with "insulex," and have a brown and beige stucco finish.

Each of the four facades has a large colored-tile clockface with roman numerals.

4. Structural system, framing: First two stories, reinforced concrete. Top two stories, wood-frame construction.
5. Openings:
 - a. Doorways and doors: The entrance door to the first-floor bedroom is made of slab wood that has been "antiqued" and connected with tongue-and-groove construction and fastened with hand-forged metal strap hinges. Second-floor entry to the Mechanism Room is identical.
 - b. Windows: The bedroom has two vertical six-light metal casement windows on the west facade, two vertical eight-light metal casement windows on the east facade and one on the north. The second floor has a six-light metal casement window.
 - c. Louvers: Each elevation has a pair of large round-arched band-sawed wooden louvers equal in height to the double-height Chimes Room directly within.
6. Roof:
 - a. Shape, covering: The tower has an eight-sided steeple roof that is connected to four octagonal corner finials by flying buttresses. The main roof is sheathed in an array of

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brightly colored tiles in zigzag patterns representative of Art Deco. Each of the four major faces has centered within it a Medieval coat of arms. The four minor faces display a "Rising Sun" motif.

- b. Cornice, eaves: Each corner of the roof is supported by a flying buttress, each of which springs from a corner finial that is smaller in scale but echoes the shape and tile design of the roof. The southeast finial houses a flue for the bedroom chimney; the northwest finial covers the exit to the stairway, and the other two have seating areas carved out from within.

C. Description of Interior:

- 1. Floor plans: See measured drawings.
- 2. Flooring:

Bedroom: The floor is laid with hexagonal ceramic red tiling. An occasional tile is imprinted with a colored image of either a castle, dragon or lion. The entirety is surrounded with a decorative border.

Mechanism Room: Gray concrete floor scored to simulate tile.

Chimes Chamber: Plain concrete floor.

Observation Deck: The floor is laid with an inter-mixing of large octagonal tiles and smaller diamond-shaped tiles, all of which are red.

- 3. Wall and Ceiling Finish:

Bedroom: The walls and ceiling are finished with a textured plaster. The ceiling is braced with concrete beams that form a "Tudoresque" pattern.

Mechanism Room: As in the bedroom, the ceiling and walls are finished with a beige textured plaster.

Chimes Chamber: The walls are finished with a smooth plaster with sculptural relief. Concrete beams brace the ceiling.

Observation Platform: The walls have a textured plaster finish.

4. Openings:

Bedroom: Closet and bathroom door have tongue-and-groove slab construction with hand-forged metal strap hinges and latch handle.

Mechanism Room: Stairway door has slab construction with hand-forged strap hinges.

Chimes Chamber: The accordion door to the spiral stairway to the observation deck is made of tongue-and-groove slab construction with hand-forged strap hinges.

5. Decorative Features: In the bedroom, the southeast corner has a small rounded fireplace. The hearth is flanked with concrete Corinthian columns that according to the original drawings were to be covered with "Art Stone," that was left unfinished. The hearth was designed to be tiled but was left unfinished.¹⁵ Light fixtures were hand-forged and have roadrunner images as their motif. A larger hexagonal fixture hangs from the center of the ceiling. The bathroom floor and the lower half of the walls have been tiled. The remainder of the walls and ceiling is completely unfinished, leaving the bare concrete exposed.

- D. Site: The Chimes Tower is the westernmost structure in the Death Valley Scotty Historic District and forms the western terminus of the major longitudinal axis. It occupies a prominent hilltop location with excellent views of the Ranch and the grounds to the east and down Grapevine Canyon to the southwest as far as the Cottonwood Mountains, the western edge of Death Valley.

PART III. PROJECT INFORMATION

The Scotty's Castle Recording Project at Death Valley National Monument, California, was undertaken during the summers 1987-89 by the Historic American Buildings Survey (HABS) division of the National Park Service, and co-sponsored by the Western Regional Office of the National Park Service. Principals involved were Robert J. Kapsch, Chief of HABS/HAER; Kenneth L. Anderson, AIA, Chief of HABS and project leader in 1987 and 1988; and Paul D. Dolinsky, Principal Architect of HABS and project leader in 1989.

The recording teams were supervised in the field by Marlys B. Thurber in 1987, John White in 1988, and Joseph D. Balachowski in 1989. The written documentation was prepared by Richard A. Bernstein of Cornell University in 1987.

PART IV. SOURCES OF INFORMATION

The repository of nearly all of the sources of information is the Reference Library and Preservation Office, Scotty's Castle, Death Valley National Monument, California. Individual references take the form of endnotes, as follows:

1. "We have poured footings for the clock tower and are building new building forms for the walls up to ground grade." Letter from M. Roy Thompson to Albert M. Johnson, dated November 1, 1928. Manuscript 7, box 7.
2. "The outside of the chimes tower is also ready for final coat [of plaster]." Letter from M. Roy Thompson to Albert M. Johnson, dated March 31, 1929. Manuscript 7, box 7.
3. "Thank you kindly for the order given us for the nine additional tower chimes to be added to the equipment you already ordered and the Electric Player. Formal acknowledgment of order is attached hereto. We also acknowledge your remittance in the amount of \$2,500 which has been credited to your account." Letter from P.K. Neuses, J.C. Deagan, Inc., Chicago, Illinois, to Albert M. Johnson, dated April 21, 1930. Manuscript 7, box 11.
4. "The low wall around the chimes tower has been poured and will be backfilled as soon as the forms are removed." Letter from M. Roy Thompson to Albert M. Johnson dated February 13, 1931. Manuscript 12, box 4.
5. "Your letter of Dec. 27 was received, in which you enclosed money order for \$30.00 covering fifteen days room and board of the Chimes erector, Roy Lofink." Letter from Miss E. Devlin to M. Roy Thompson dated January 2, 1931. Manuscript 7, box 13.
6. Letter from Miss E. Devlin to M. Roy Thompson, dated January 2, 1931. Manuscript 7, box 13.
7. Correspondence with Mr. Boling is on file in the Reference Library at Scotty's Castle, Death Valley National Monument.
8. Letter from Albert M. Johnson to Charles Alexander MacNeill dated 7/26/27. Manuscript 5, box 1.
9. From the beginning Johnson wanted the Tower to be designed to accommodate a twenty-five tone chimes system. He planned, however, to only purchase a sixteen tone system at first and the rest at a later date. Scotty's Castle Handbook (#2, Revised 1986), 50-51.
10. See architectural drawing, catalogue no. 20078.

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11. Letter from J.C. Deagan Inc. to Albert M. Johnson dated April 21, 1930. Manuscript 7, box 16.

12. The use of the word "chimes" in this case is a misnomer. Technically a chime is a straight hollow tube with the thickness of the metal remaining constant. Those purchased by Johnson were actually tubular bells because they had curved inner surfaces and irregular thicknesses in order to modulate the sound. Scotty's Castle Handbook, 50. Ironically they were confusingly marketed as the "Deagan Tubular Bell Tower Chimes." See copy of advertising brochure in manuscript 7, box 16.

13. Scotty's Castle Handbook, 50-51.

14. Scotty's Castle Historical Documents File. Record group 1, box 4.

15. The original drawing is dated November 16, 1928. See architectural drawing, catalogue no. 19948. No reference to "Art Stone" has been found. "Art Rock," however, is a commercial name for a "cold water paint" and that might be what the drawing refers to. Incoming correspondence from Blue Diamond Co., Los Angeles, California, to Death Valley Mercantile Co., Bonnie Claire, Nevada, dated December 8, 1926. Manuscript 7, box 15. This letter does not make clear for what decorative effect such a paint was intended.

ADDENDUM TO:
DEATH VALLEY RANCH, CHIMES TOWER
Death Valley National Park
Death Valley vicinity
Inyo County
California

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